=> d his

L1

L5

(FILE 'HOME' ENTERED AT 17:57:21 ON 16 JAN 2004)

FILE 'CAPLUS' ENTERED AT 18:00:09 ON 16 JAN 2004

E SCHLOEMER G/IN

17 S E4-E6

0 S L1 AND ACETAMIDE? L2L30 S L1 AND IMIDAZO?

L47 S L1 AND PROCESS

5 S DIMETHYLGLYOXYLAMIDE

SELECT L5 5 RN

FILE 'REGISTRY' ENTERED AT 18:16:26 ON 16 JAN 2004

L6 3 S E1-E3

> FILE 'CAPLUS' ENTERED AT 18:18:30 ON 16 JAN 2004 SELECT L5 4 RN

FILE 'REGISTRY' ENTERED AT 18:18:53 ON 16 JAN 2004

L7 3 S E4-E6

FILE 'REGISTRY' ENTERED AT 18:30:24 ON 16 JAN 2004

STRUCTURE UPLOADED L8

0 S L8 L9

FILE 'BEILSTEIN' ENTERED AT 18:31:02 ON 16 JAN 2004

L100 S L8

1 S L8 SSS FULL L11

FILE 'REGISTRY' ENTERED AT 18:32:54 ON 16 JAN 2004 L12

2 S L8 SSS FULL

FILE 'CAPLUS' ENTERED AT 18:33:36 ON 16 JAN 2004 L13 4 S L12

=> d 18

L8 HAS NO ANSWERS

OН

G1 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu

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10/620209
=> d 1-4 bib abs hitstr
L13 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ΑN
     1991:101100 CAPLUS
     114:101100
DN
      One-pot synthesis of N,N,N',N'-tetrasubstituted ureas and oxomalonamides
     by oxidative carbonylation of lithium amides at atmospheric pressure
     Nudelman, Norma S.; Lewkowicz, Elizabeth S.; Perez, Daniel G.
ΑU
     Fac. Cienc. Exactas, Univ. Buenos Aires, Buenos Aires, 1428, Argent.
CS
SO
     Synthesis (1990), (10), 917-20
     CODEN: SYNTBF; ISSN: 0039-7881
DT
LA
     English
     CASREACT 114:101100
OS
AB
     N,N,N',N'-tetrasubstituted ureas RR1NCONRR1 (R = R1 = Bu, cyclohexyl,
     CHMe2, cyclohexyl) were prepd. in good yields by reaction of lithium aliph. amides RR1NLi in THF soln. with CO under mild conditions
      (0.degree., 1013 mbar) followed by treatment with oxygen prior to work up.
     N,N,N',N'-tetrasubstituted oxomalonamides (oxopropanediamides)
     RRINCOCOCONRRI were prepd. under similar reaction conditions by carrying
     out the reaction in the presence of known amts. of the pure amine.
     Besides being an useful synthetic method, the present studies afford new
     evidence of the mechanism of the reaction.
     83862-73-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of)
RN
     83862-73-1 CAPLUS
     Acetamide, 2,2'-oxybis[N,N-dibutyl-2-hydroxy- (9CI) (CA INDEX NAME)
CN
(n-Bu)_2N-C
            -CH-O-CH-C-N(Bu-n)_2
L13 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     1988:55481 CAPLUS
DN
     108:55481
     Carbon-carbon bond formation through the carbonylation of lithium
     dialkylamides. One-pot synthesis of N-alkyl-substituted formamides,
     glyoxylamides, and hydroxymalonamides
AU
     Perez, Daniel G.; Nudelman, N. Sbarbati
     Fac. Cienc. Exactas, Univ. Buenos Aires, Buenos Aires, 1428, Argent.
CS
     Journal of Organic Chemistry (1988), 53(2), 408-13
     CODEN: JOCEAH; ISSN: 0022-3263
DT
     Journal
LA
     English
os
     CASREACT 108:55481
     The reaction of RRINLi (R = R1 = Bu, pentyl, cyclohexyl; R = iso-Pr, R1 =
     cyclohexyl; RR1 = 3-oxapentamethylene) with CO to yield RRINCHO,
     (RR1NCOCHOH) 20, and RR1NCOCH(OH) CONRR1 (R, R1 = same as above) was examd.
     under a no. of different conditions. Evidence supporting a lithium
     carbamoyl intermediate for the latter compds. is presented. A general
     procedure for the prepn. of tetraalkylureas, tetraalkyloxalamides, and tetraalkyloxomalonamides is given.
IT
     83862-73-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN
     83862-73-1 CAPLUS
    Acetamide, 2,2'-oxybis[N,N-dibutyl-2-hydroxy- (9CI) (CA INDEX NAME)
            OH
                   OH O
(n-Bu) 2N-C-CH-O-CH-C-N (Bu-n) 2
```

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L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:34210 CAPLUS
DN 98:34210
TI Insertion of carbon monoxide into lithium-nitrogen bonds. One-pot synthesis of dialkylformamides and dialkylgloxylamides
AU Nudelman, N. Sbarbati; Perez, Daniel
CS Fac. Cienc. Exactas Nat., Univ. Buenos Aires, Buenos Aires, 1428, Argent.
SO Journal of Organic Chemistry (1983), 48(1), 133-4
CODEN: JOCEAH; ISSN: 0022-3263
```

```
10/620209
DT
     Journal
LΑ
     English
os
     CASREACT 98:34210
AB
     Lithium dialkylamides react with CO to afford dialkylformamides (I),
     tetralkylhydroxymalonamides and dialkylglyoxylamides (II). Reaction
     conditions are described to produce I or II in good yields.
IT
     83862-73-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN
     83862-73-1 CAPLUS
CN
     Acetamide, 2,2'-oxybis[N,N-dibutyl-2-hydroxy- (9CI) (CA INDEX NAME)
                  OH O
            -CH-O-CH-C-N(Bu-n)_2
(n-Bu)_2N-C
L13
    ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     1979:121688 CAPLUS
DN
     90:121688
TΙ
     Carbonylation of lithium dialkylamides to carbamoyllithium derivatives
AU
     Rautenstrauch, Valentin; Joyeux, Michel
CS
     Forschungslab., Firmenich S. A., Geneva, Switz.
     Angewandte Chemie (1979), 91(1), 72-3
so
     CODEN: ANCEAD; ISSN: 0044-8249
DT
     Journal
LA
     German
os
     CASREACT 90:121688
GI
```

- AB Lithiation of piperidine gave lithium piperidide, carbonylation of which gave I which was hydrolyzed to give 20-30% II. Reaction of I with cyclohexanone gave 85% 4:1 III-IV. Similarly, (Me2CH)2NH was lithiated, carbonylated, and hydrolyzed to give 20-40% (Me2CH) 2NCHO. IT 68986-67-4P
- RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) RN 68986-67-4 CAPLUS
- Acetamide, 2,2'-oxybis[2-hydroxy-N,N-bis(1-methylethyl)- (9CI) (CA INDEX CN

```
=> s dimethylglyoxylamide
              5 DIMETHYLGLYOXYLAMIDE
L_5
=> d 1~5 bib abs kwic
     ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
     2003:887680 CAPLUS
AN
DN
     139:364844
TT
     Preparation of indolizines as sPLA2 inhibitors
     Dillard, Robert D.; Hagishita, Sanji; Ohtani, Mitsuaki
IN
PA
     Eli Lilly and Company, USA; Shiongi and Company, Ltd.
     U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 278,445.
     CODEN: USXXAM
DТ
     Patent
LА
     English
FAN.CNT 2
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO. DATE
РΤ
     US 6645976
                        R1
                             20031111
                                             US 1997-765566
     WO 9603383
                            19960208
                                             WO 1995-US9381
                       A1
                                                             19950720
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
             MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
             TM, TT
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN. TD. TG
PRAI US 1994-278445
                       A2
                             19940721
     WO 1995-US9381
                        W
                             19950720
OS
     MARPAT 139:364844
GT
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
     Title compds. I, II, III [wherein X = O or S; R11 = independently H,
     alkyl, or halo; R12 = H, halo, (cyclo)alkyl, cycloalkenyl, alkoxy,
     alkylthio, or a non-interfering substituent having 1-3 atoms other than H;
     R13 = (un) substituted alkyl, alkenyl, alkynyl, (hetero) cyclyl optionally
     connected by a linking group; R15 and R16 = independently H,
     non-interfering substituent, or (un) substituted (hetero) cyclyl; R17 and R18 = independently H, non-interfering substituent, or acidic linker; with
     the proviso that at least one of R17 and R18 must be an acidic linker; or
    pharmaceutically acceptable salt, ester, or amide prodrug derivs.
     thereof], and their 3-acetamide, 3-acetic acid hydrazide, and
     3-glyoxylamide analogs were prepd. as inhibitors of human secreted
     phospholipase A2 (sPLA2) mediated release of fatty acids. For example,
     conversion of 2-methyl-5-methoxypyridine to the anion in THF using lithium
    diisopropylamide and subsequent reaction with benzonitrile produced
     5-methoxy-2-phenacylpyridine (57.0%). Cyclization of the pyridine deriv.
    with 1-bromo-2-butanone using NaHCO3 in acetone gave the
    1-benzoylindolizine (90.7%), which was reduced by LAH to give
    1-benzyl-2-ethyl-6-methoxyindolizine (94.5%). Acylation (98.5%) with Et
    oxalyl chloride in benzene, followed by sapon. with LiOH in H2O and
    amidation using NH4OH, provided 2-(1-benzyl-2-ethyl-6-methoxyindolizin-3-
    yl)glyoxylamide. Demethylation by BBr3 in CH2Cl2, coupling with Et
    4-bromobutyrate (56.2%) in the presence of NaH in DMF, and hydrolysis with
    LiOH gave the title indolizine IV (49.9%). Eighty-eight compds. of the
    invention inhibited recombinant human sPLA2 in a chromogenic assay with
    IC50 values ranging from 0.006 .mu.M to 1.1 .mu.M, in contrast to IC50
    values >50 .mu.M for comparative examples. Administration of 10/mg/kg of
    the representative compd., 2-[8-(carbomethoxymethoxy)-2-ethyl-3-(2-
    phenylbenzyl) indolizin-1-yl]glyoxylamide, improved the survival rate of
    male Wistar rats with sPLA2-induced pancreatitis from 33.3% (vehicle) to
            Thus, invention compds. and their pharmaceutical formulations are
```

ALL CITATIONS AVAILABLE IN THE RE FORMAT

177556-77-3P, 2-(3-Benzyl-8-hydroxy-2-ethylindolizin-1-yl)acetamide
177556-79-5P, 2-[2-Ethyl-8-hydroxy-3-(o-phenylbenzyl)indolizin-1yl]acetamide 177556-80-8P, 2-[3-(m-Chlorobenzyl)-2-ethyl-8hydroxyindolizin-1-yl]acetamide 177556-81-9P, 2-[2-Cyclopropyl-8-hydroxy3-(o-phenylbenzyl)indolizin-1-yl]acetamide 177556-84-2P,
2-[8-[[(Benzyloxycarbonyl)methyl]oxy]-2-ethyl-3-(o-phenylbenzyl)indolizin-

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

useful for the treatment of conditions such as septic shock, adult respiratory distress syndrome, pancreatitis, trauma, bronchial asthma.

allergic rhinitis, and rheumatoid arthritis.

RE.CNT 6

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 1-y1] acetamide \\ 177556-85-3P, \\ 2-[8-[[(Benzyloxycarbonyl)methyl]oxy]-3-(m-chlorobenzyl)-2-ethylindolizin-1-y1] acetamide \\ 177556-86-4P, 
                                                          177556-86-4P,
2-[8-[[(Carbomethoxy)methyl]oxy]-2-cyclopropyl-3-(o-phenylbenzyl)indolizin-
1-vllacetamide
                    177556-92-2P, 2-(3-Benzyl-2-methylindolizin-1-
                     177556-93-3P, 2-(3-Benzyl-8-benzyloxy-2-ethylindolizin-1-177556-94-4P, 2-(3-Benzyl-8-benzyloxy-2-ethylindolizin-1-
yl)glyoxylamide
yl)glyoxylamide
yl)-N-methylglyoxylamide 177556-95-5P, 2-(3-Benzyl-8-benzyloxy-2-
ethylindolizin-1-yl)-N,N-dimethylglyoxylamide
                                                          177556-96-6P,
2-[8-Benzyloxy-2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide
177556-97-7P, 2-[8-Benzyloxy-2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]-N-methylglyoxylamide 177556-98-8P, 2-[8-Benzyloxy-2-ethyl-3-(o-
phenylbenzyl)indolizin-1-yl]-N,N-dimethylglyoxylamide
177556-99-9P, 2-(3-Benzyl-8-benzyloxy-2-methylindolizin-1-yl)glyoxylamide 177557-00-5P, 2-[8-Benzyloxy-3-(m-chlorobenzyl)-2-ethylindolizin-1-
yl]glyoxylamide 177557-01-6P, 2-[8-Benzyloxy-2-ethyl-3-(m-
trifluoromethylbenzyl)indolizin-1-yl]qlyoxylamide
                                                               177557-02-7P,
2-[8-Benzyloxy-2-ethyl-3-(1-naphthylmethyl)indolizin-1-yl]glyoxylamide
177557-03-8P, 2-[8-Benzyloxy-2-cyclopropyl-3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide 177557-25-4P, 2-[8-Benzyloxy-2-ethyl-3-(p-
phenylbenzyl)indolizin-1-yl]glyoxylamide 177557-26-5P,
2-(8-Benzyloxy-3-cyclohexylmethyl-2-ethylindolizin-1-yl)glyoxylamide
177557-27-6P, 2-(8-Benzyloxy-3-cyclopentylmethyl-2-ethylindolizin-1-yl)glyoxylamide 177557-28-7P, 2-(8-Benzyloxy-3-cycloheptylmethyl-2-ethylindolizin-1-yl)glyoxylamide 177557-29-8P, 2-[8-Benzyloxy-2-ethyl-3-
                                           177557-30-1P, 2-[8-Benzyloxy-2-ethyl-3-
pentylindolizin-1-yl)glyoxylamide
(2-propylpentyl)indolizin-1-yl]glyoxylamide 177557-31-2P,
2-[8-Benzyloxy-2-ethyl-3-[(naphth-2-yl)methyl]indolizin-1-yl]glyoxylamide
177557-32-3P, 2-[8-Benzyloxy-3-(3,5-di-tert-butylbenzyl)-2-ethylindolizin-
                       177557-33-4P, 2-[8-Benzyloxy-2-ethyl-3-(2-
1-yl]glyoxylamide
phenylethyl) indolizin-1-yl]glyoxylamide 177557-34-5P,
2-[8-Benzyloxy-3-(o-benzylbenzyl)-2-ethylindolizin-1-yl]qlyoxylamide
177557-35-6P, 2-[8-Benzyloxy-2-ethyl-3-[(thiophen-2-yl)methyl]indolizin-1-
yl]glyoxylamide 177557-36-7P, 2-[8-Benzyloxy-2-ethyl-3-[[3-(thiophen-2-yl)thiophen-2-yl]methyl]indolizin-1-yl]glyoxylamide 177557-37-8P,
2-[8-Benzyloxy-2-ethyl-3-(m-methoxybenzyl)indolizin-1-yl]glyoxylamide 177557-38-9P, 2-[8-Benzyloxy-2-ethyl-3-(o-nitrobenzyl)indolizin-1-
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methylindolizin-1-yl]glyoxylamide 177557-42-5P, 2-(3-Benzyl-8-benzyloxy-2-cyclopropylindolizin-1-yl)glyoxylamide 177557-43-6P,
2-[3-(p-Butylbenzyl)-2-ethyl-8-methoxyindolizin-1-yl]glyoxylamide
177557-44-7P, 2-(8-Benzyloxy-3-cyclohexylmethyl-2-methylindolizin-1-
yl)glyoxylamide 177557-48-1P, 2-[8-[[(Carbomethoxy)methyl]oxy]-3-
cyclohexylmethyl-2-ethylindolizin-1-yl]glyoxylamide 177557-49-2P, 2-[8-[[(Carbomethoxy)methyl]oxy]-3-cyclopentylmethyl-2-ethylindolizin-1-
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2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-pentylindolizin-1-
                     177557-52-7P, 2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-
yl]glyoxylamide
(2-propylpentyl)indolizin-1-yl]glyoxylamide
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2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-[(naphth-2-yl)methyl]indolizin-
1-yl]glyoxylamide 177557-55-0P, 2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-
3-(2-phenylethyl)indolizin-1-yl]glyoxylamide
                                                        177557-56-1P,
2-[3-(o-Benzylbenzyl)-8-[[(carbomethoxy)methyl]oxy]-2-ethylindolizin-1-
yl]glyoxylamide 177557-58-3P, 2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-
[[3-(thiophen-2-yl)thiophen-2-yl]methyl]indolizin-1-yl]glyoxylamide
177557-59-4P, 2-[2-Ethyl-8-[[(carbomethoxy)methyl]oxy]-3-(m-
methoxybenzyl)indolizin-1-yl]glyoxylamide 177557-60-7P,
2-[2-Ethyl-8-[[(carbomethoxy)methyl]oxy]-3-(o-nitrobenzyl)indolizin-1-
yl]glyoxylamide 177557-62-9P, 2-[3-[(Adamant-1-yl)methyl]-8-
[[(carbomethoxy)methyl]oxy]-2-methylindolizin-1-yl]glyoxylamide
177557-63-0P, 2-[3-Benzyl-8-[[(carbomethoxy)methyl]oxy]-2-
cyclopropylindolizin-1-yl]glyoxylamide 177557-64-1P, 2-[3-(p-Butylbenzyl)-8-[[(carbomethoxy)methyl]oxy]-2-ethylindolizin-1-
yl]glyoxylamide 177557-65-2P, 2-[8-[[(Carbomethoxy)methyl]oxy]-3-
cyclohexylmethyl-2-methylindolizin-1-yl]glyoxylamide
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2-[8-[(Carboxymethyl)oxy]-3-(3,5-di-tert-butylbenzyl)-2-ethylindolizin-1-
yl]glyoxylamide
                     177557-88-9P, 2-[3-[(Biphenyl-2-yl)methyl]-8-
[[(carbomethoxy)methyl]oxy]-2-methylindolizin-1-yl]glyoxylamide
177557-89-0P, 2-[3-[(Biphenyl-2-yl)methyl]-8-[[(carbomethoxy)methyl]oxy]-2-
isopropylindolizin-1-yl]glyoxylamide
                                               177557-90-3P, 2-[2-tert-Butyl-8-
[[(carbomethoxy)methyl]oxy]-3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide
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phenylbenzyl)indolizin-1-yl]glyoxylamide 177557-92-5P,
2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-(m-phenylbenzyl)indolizin-1-
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(3-phenyl-2-propenyl)indolizin-1-yl]glyoxylamide 177557-94-7P,
2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-(3-phenylpropyl)indolizin-1-
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yl]glyoxylamide
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cyclopropyl-3-[(1-naphthyl)methyl]indolizin-1-yl]qlyoxylamide
177557-96-9P, 2-[8-[[(Carbomethoxy)methyl]oxy]-3-cyclohexylmethyl-2-
                                         177557-97-0P,
cyclopropylindolizin-1-yl]glyoxylamide
2-[3-[(Biphenyl-2-yl)methyl]-8-(carboxymethoxy)-2-methylindolizin-1-
                 177557-99-2P, 2-[2-tert-Butyl-8-(carboxymethoxy)-3-(o-
vllglvoxvlamide
phenylbenzyl)indolizin-1-yl]glyoxylamide 177558-00-8P, 2-[8-[(Carboxymethyl)oxy]-2-cyclopentyl-3-(o-phenylbenzyl)indolizin-1-
                  177558-01-9P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(m-
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phenylbenzyl)indolizin-1-yl]glyoxylamide 177558-02-0P,
2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(3-phenyl-2-propenyl)indolizin-1-
                  177558-03-1P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(3-
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phenylpropyl) indolizin-1-yl]glyoxylamide 177558-04-2P
2-[8-(Carboxymethoxy)-2-cyclopropyl-3-[(1-naphthyl)methyl]indolizin-1-
yl]glyoxylamide
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2-[3-Benzyl-7-(3-carbethoxypropyloxy)-2-ethylindolizin-1-yl]glyoxylamide
177559-80-7P, 2-[7-(3-Carbethoxypropyloxy)-2-cyclopropyl-3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide 177559-81-8P,
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vllqlvoxvlamide
                  177559-82-9P, 2-[7-[[3-(Carbethoxy)propyl]oxy]-3-
cyclohexylmethyl-2-ethylindolizin-1-yl]glyoxylamide 177559-84-1P,
2-[7-[((Carboethoxy)methyl)oxy]-2-ethyl-3-(o-phenylbenzyl)indolizin-1-
yl]glyoxylamide 177559-99-8P, 2-[3-Benzyl-8-
[[(methoxycarbonyl)methyl]amino]-2-methylindolizin-1-yl]glyoxylamide
177560-00-8P, 2-[8-[[(Methoxycarbonyl)methyl]amino]-3-cyclohexylmethyl-2-
methylindolizin-1-yl]glyoxylamide 182115-63-5P, Methyl
2-[[3-Benzyl-1-(carbamoylmethyl)-2-ethylindolizin-8-yl]oxy]acetate
182115-76-0P, 2-[8-Benzyloxy-2-ethyl-3-[(4-pentylcyclohexyl)methyl]indoliz in-1-yl]glyoxylamide 182115-78-2P, 2-(8-Benzyloxy-3-cyclopentylmethyl-2-
cyclopropylindolizin-1-yl)glyoxylamide
                                          182115-84-0P,
2-[8-Hydroxy-2-ethyl-3-(4-pentylcyclohexylmethyl)indolizin-1-
ethylindolizin-1-yl]glyoxylamide 182115-87-3P, 2-[8-
[[(Carbethoxy)methyl]oxy]-2-ethyl-3-(o-phenylbenzyl)indolizin-1-
                 182115-88-4P, 2-[8-[[(Carbethoxy)methyl]oxy]-3-(m-
vllglvoxvlamide
chlorobenzyl)-2-ethylindolizin-1-yl]glyoxylamide 182115-90-8P,
2-[8-[[(Carbethoxy)methyl]oxy]-2-ethyl-3-[(1-naphthyl)methyl]indolizin-1-
yl]glyoxylamide 182115-92-0P, 2-[3-Benzyl-8-[[(carbethoxy)methyl]oxy]-2-
methylindolizin-1-yl]glyoxylamide 182115-93-1P, 2-[8-
[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-[(4-pentylcyclohexyl)methyl]indolizi
n-1-yl]glyoxylamide
                      182116-42-3P, 2-[7-(5-Carboethoxypentyloxy)-2-ethyl-
3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide
                                                 182116-44-5P,
2-[3-Benzyl-8-[[(methoxycarbonyl)methyl]amino]-2-methylindolizin-1-
               182116-45-6P, 2-[3-Benzyl-8-[(carboxymethyl)amino]-2-
yl]acetamide
methylindolizin-1-yl]acetamide 182116-49-0P, 2-[8-(3-
Carbomethoxypropyloxy) -2-ethyl-3-(o-phenylbenzyl)indolizin-1-
vllglvoxvlamide
                 215160-62-6P, 2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-
(o-phenylbenzyl)indolizin-1-yl]glyoxylamide
                                              215160-63-7P,
2-[3-Benzyl-8-[[(tert-butoxycarbonyl)methyl]oxy]-2-ethylindolizin-1-
yl]glyoxylamide 215160-64-8P 215160-65-9P 622835-99-8P,
2-[3-(1-Naphthyl)-8-hydroxy-2-ethylindolizin-1-yl]acetamide
622836-00-4P, Methyl 2-[[3-Naphthyl-1-(carbamoylmethyl)-2-ethylindolizin-8-
vlloxvlacetate
                622836-03-7P, 2-[3-Benzyl-8-[[(carbethoxy)methyl]oxy]-2-
ethylindolizin-1-yl]-N-methylglyoxylamide
                                             622836-04-8P,
2-[3-Benzyl-8-[[(carbethoxy)methyl]oxy]-2-ethylindolizin-1-yl]-N,N-
dimethylglyoxylamide
                      622836-05-9P, 2-[8-
[[(Carbethoxy)methyl]oxy]-2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]-N,N-
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622836-07-1P, 2-[8-(Cyanomethyloxy)-2-ethyl-
     dimethylglyoxylamide
     3-[(1-naphthyl)methyl]indolizin-1-yl]glyoxylamide 622836-33-3P,
     2-[3-[(Adamant-1-yl)methyl]-8-benzyloxy-2-ethylindolizin-1-yl)glyoxylamide 622836-34-4P, 8-Benzyloxy-3-(cyclopentylcarbonyl)-2-cyclopropylindolizine
     622836-35-5P, 8-Benzyloxy-3-cyclopentylmethyl-2-cyclopropylindolizine
     622836-36-6P, 2-[8-[[(Carbomethoxy)methyl]oxy]-2-ethyl-3-(thiophen-2-
     yl)indolizin-1-yl]glyoxylamide 622836-37-7P, 2-(3-Cyclopentylmethyl-2-
     cyclopropyl-8-hydroxyindolizin-1-yl)glyoxylamide
                                                              622836-57-1P.
     2-[3-(Biphenyl-2-yl)-8-[[(carbomethoxy)methyl]oxy]-2-methoxyindolizin-1-
     yl]glyoxylamide
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
(sPLA2 inhibitor; prepn. of indolizines as inhibitors of sPLA2 mediated
        release of fatty acids)
TT
     177556-76-2P, 2-[1-Benzyl-6-(3-carboxypropyloxy)-2-ethylindolizin-3-
     yl]glyoxylamide 177556-87-5P, 2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-
                                        177556-89-7P, 2-[8-[(Carboxymethyl)oxy]-2-
     ethylindolizin-1-yl]acetamide
     ethyl-3-(o-phenylbenzyl)indolizin-1-yl]acetamide 177556-90-0P,
     2-[8-[(Carboxymethyl)oxy]-3-(m-chlorobenzyl)-2-ethylindolizin-1-yl]acetamide 177556-91-1P, 2-[8-[(Carboxymethyl)oxy]-2-cyclopropyl-3-(o-
     phenylbenzyl)indolizin-1-yl]acetamide
                                                177557-67-4P, 2-[2-Ethyl-8-
     [(carboxymethyl)oxy]-3-(p-phenylbenzyl)indolizin-1-yl]glyoxylamide
     ethylindolizin-1-yl]glyoxylamide 177557-69-6P, 2-[8-[3-cyclopentylmethyl-2-ethylindolizin-1-yl]glyoxylamide
                                                                    177557-70-9P,
     2-[8-[(Carboxymethyl)oxy]-3-cycloheptylmethyl-2-ethylindolizin-1-
     yl]glyoxylamide
                        177557-71-0P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-
     pentylindolizin-1-yl]glyoxylamide 177557-72-1P, 2-[8-
     [(Carboxymethyl)oxy]-2-ethyl-3-(2-propylpentyl)indolizin-1-yl]glyoxylamide
     177557-75-4P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(2-phenylethyl)indolizin-
     1-yl]glyoxylamide
                           177557-76-5P, 2-[8-[(Carboxymethyl)oxy]-3-(o-
     benzylbenzyl) -2-ethylindolizin-1-yl]glyoxylamide
                                                             177557-77-6P,
     2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-[(thiophen-2-yl)methyl]indolizin-1-
     yl]glyoxylamide 177557-78-7P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-[[3-(thiophen-2-yl)thiophen-2-yl]methyl]indolizin-1-yl]glyoxylamide
     177557-79-8P, 2-[2-Ethyl-8-[(carboxymethyl)oxy]-3-(m-
     methoxybenzyl)indolizin-1-yl]glyoxylamide
                                                     177557-80-1P
     2-[2-Ethyl-8-[(carboxymethyl)oxy]-3-(o-nitrobenzyl)indolizin-1-yl]glyoxylamide 177557-82-3P, 2-[3-[(Adamant-1-yl)methyl]-8-[(carboxymethyl)oxy]-2-methylindolizin-1-yl]glyoxylamide 177557-83-4P,
     2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-cyclopropylindolizin-1-
     yl]glyoxylamide 177557-84-5P, 2-[3-(p-Butylbenzyl)-8-
     [(carboxymethyl)oxy]-2-ethylindolizin-1-yl]glyoxylamide
                                                                      177557-85-6P,
     2-[8-[(Carboxymethyl)oxy]-3-cyclohexylmethyl-2-methylindolizin-1-
     yl]glyoxylamide 177557-86-7P, 2-[8-[(Carboxymethyl)oxy]-3-
     cyclopentylmethyl-2-cyclopropylindolizin-1-yl]glyoxylamide
                                                                         177557-87-8P.
     2-[8-[(Carboxymethyl)oxy]-3-cyclopentylmethyl-2-methylindolizin-1-
     yl]glyoxylamide 177558-06-4P, 2-[3-[(Biphenyl-2-yl)methyl]-8-
     [(carboxymethyl)oxy]-2-ethylindolizin-1-yl]glyoxylamide sodium salt
     177558-07-5P, 2-[3-[(Biphenyl-2-y1)methyl]-8-[[[1-
     (methoxycarbonyloxy) ethoxy] carbonyl] methoxy] -2-ethylindolizin-1-
                        177558-08-6P, 2-[3-[(Biphenyl-2-yl)methyl]-2-ethyl-8-
     yl]qlyoxylamide
     [[[1-(isopropyloxycarbonyloxy)ethoxy]carbonyl]methoxy]indolizin-1-
                        177558-11-1P, 2-[3-[(Biphenyl-2-yl)methyl]-8-[[[[[1-
     yl]glyoxylamide
     (cyclopentyloxycarbonyloxy)ethyl]oxy]carbonyl]methyl]oxy]-2-ethylindolizin-
     1-yl]qlyoxylamide
                          177558-12-2P, 2-[3-[(Biphenyl-2-yl)methyl]-8-[[[[[1-
     [(cyclopentylcarbonyl)oxy]ethyl]oxy]carbonyl]methyl]oxy]-2-ethylindolizin-
     1-yl]glyoxylamide
                          177558-18-8P, 2-[3-[(Biphenyl-2-yl)methyl]-2-ethyl-8-
     [[(1H-tetrazol-5-yl)methyl]oxy]indolizin-1-yl]glyoxylamide
     2-[3-Benzyl-7-(3-carboxypropyloxy)-2-ethylindolizin-1-yl]glyoxylamide
     177558-23-5P, 2-[7-(3-Carboxypropyloxy)-2-cyclopropyl-3-(o-
    phenylbenzyl)indolizin-1-yl]glyoxylamide 177558-24-6P,
     2-[7-(3-Carboxypropyloxy)-2-ethyl-3-(o-phenylbenzyl)indolizin-1-
    yl]glyoxylamide
                         177558-25-7P, 2-[7-(3-Carboxypropyloxy)-3-
     cyclohexylmethyl-2-ethylindolizin-1-yl]glyoxylamide 177558-26-8P,
     2-[3-[(Biphenyl-2-yl)methyl]-8-(3-carboxypropyloxy)-2-ethylindolizin-1-
    yl]glyoxylamide 177558-27-9P, 2-[7-[(Carboxymethyl)oxy]-2-ethyl-3-(o-
    phenylbenzyl)indolizin-1-yl]glyoxylamide
                                                    177558-29-1P,
     2-[3-[(Biphenyl-2-yl)methyl]-8-(2-carboxyethyloxy)-2-ethylindolizin-1-
    yl]glyoxylamide
                        177558-31-5P, 2-[3-[(Biphenyl-2-yl)methyl]-8-(2-
    2-[7-(3-Carbethoxypropyloxy)-2-ethylindolizin-1-yl]glyoxylamide 177558-32
2-[7-(3-Carbethoxypropyloxy)-2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]acetamide 177558-33-7P, 2-[7-(3-Carboxypropyloxy)-2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]acetamide 177558-35-9P, 2-[8-
                                                                      177558-32-6P,
     [(Carboxymethyl)oxy]-2-methylthio-3-(o-phenylbenzyl)indolizin-1-
    yl]glyoxylamide 177560-01-9P, 2-[3-Benzyl-8-[(carboxymethyl)amino]-2-
    methylindolizin-1-yl]glyoxylamide 177560-02-0P, 2-[8-
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[(Carboxymethyl)amino]-3-cyclohexylmethyl-2-methylindolizin-1-
      yl]glyoxylamide 182115-96-4P, 2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-ethylindolizin-1-yl]glyoxylamide 182115-97-5P, 2-[8-[(Carboxymethyl)oxy]-
      2-ethyl-3-(o-phenylbenzyl)indolizin-1-yl]glyoxylamide
                                                                  182115-98-6P,
      2-[8-[(Carboxymethyl)oxy]-3-(m-chlorobenzyl)-2-ethylindolizin-1-
      yl]glyoxylamide 182115-99-7P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(m-trifluoromethylbenzyl)indolizin-1-yl]glyoxylamide 182116-00-3P,
      2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-[(1-naphthyl)methyl]indolizin-1-
      yl]glyoxylamide
                         182116-01-4P, 2-[8-[(Carboxymethyl)oxy]-2-cyclopropyl-3-
      (o-phenylbenzyl)indolizin-1-yl]glyoxylamide 182116-02-5P,
      2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-methylindolizin-1-yl]glyoxylamide
      182116-03-6P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(4-
     pentylcyclohexylmethyl)indolizin-1-yllglyoxylamide
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      2-[7-(5-Carboxypentyloxy)-2-ethyl-3-(o-phenylbenzyl)indolizin-1-
     yl]glyoxylamide
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      [(pyridin-2-yl)methoxy]indolizin-1-yl]glyoxylamide 182116-47-8P,
      2-[3-[(Biphenyl-2-yl)methyl]-2-methyl-8-[(pyridin-4-yl)methoxy]indolizin-1-
                        182116-48-9P, 2-[3-[(Biphenyl-2-yl)methyl]-2-methyl-8-
     yl]glyoxylamide
      [(quinolin-2-yl)methoxy]indolizin-1-yl]glyoxylamide 182116-50-3P,
      2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-ethylindolizin-1-yl]-N-
     methylglyoxylamide
                           182116-51-4P, 2-[3-Benzyl-8-[(carboxymethyl)oxy]-2-
     ethylindolizin-1-yl]-N,N-dimethylglyoxylamide 622836-01-5P,
     2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(1-naphthyl)indolizin-1-yl]acetamide 622836-06-0P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(0-
     phenylbenzyl)indolizin-1-yl]-N,N-dimethylglyoxylamide
     622836-08-2P, 2-[8-[[(1H-Tetrazol-5-yl)methyl]oxy]-2-ethyl-3-[(1-
     naphthyl)methyl]indolizin-1-yl]glyoxylamide
                                                       622836-38-8P,
     2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(naphth-2-yl)indolizin-1-yl]glyoxylamide 622836-39-9P, 2-[8-[(Carboxymethyl)oxy]-2-ethyl-3-(4-
     pentylcyclohexylmethyl)indolizin-1-yl]glyoxylamide sodium salt
     622836-40-2P, 2-[8-[(Carboxymethyl)oxy]-3-cyclohexylmethyl-2-
     methylindolizin-1-yl]glyoxylamide sodium salt 622836-41-3P,
     2-[8-[(Carboxymethyl)oxy]-3-cyclopentylmethyl-2-methylindolizin-1-yl]glyoxylamide sodium salt 622836-43-5P, 2-[3-[(Biphenyl-2-yl)methyl]-8-
     [[[[(tert-butoxycarbonyl)methyl]oxy]carbonyl]methyl]oxy]-2-ethylindolizin-
     1-yl]glyoxylamide
                           622836-44-6P, 2-[3-[(Biphenyl-2-yl)methyl]-8-[[[[[1-
      (cyclohexyloxycarbonyl)ethyl]oxy]carbonyl]methyl]oxy]-2-ethylindolizin-1-
     yl]glyoxylamide 622836-45-7P, 2-[3-[(Biphenyl-2-yl)methyl]-2-ethyl-8-
[[[[1-[(1-methylcyclopentyloxy)carbonyl]ethyl]oxy]carbonyl]methyl]oxy]ind
     olizin-1-yl]glyoxylamide 622836-46-8P, 2-[3-[(Biphenyl-2-yl)methyl]-2-
     ethyl-8-[[[[[2-(morpholino)ethyl]oxy]carbonyl]methyl]oxy]indolizin-1-
     yl]glyoxylamide 622836-47-9P 622836-48-0P, 2-[3-[(Biphenyl-2-
     yl)methyl]-2-ethyl-8-[[[(2-oxopropyl)oxy]carbonyl]methoxy]indolizin-1-
     yl]glyoxylamide 622836-49-1P, 2-[3-[(Biphenyl-2-yl)methyl]-2-ethyl-8-
     [[(1-trityltetrazol-5-yl)methyl]oxy]indolizin-1-yl]glyoxylamide
     622836-50-4P, 2-[7-(2-Carboethoxyethyloxy)-2-ethyl-3-(o-
     phenylbenzyl)indolizin-1-yl]glyoxylamide 622836-58-2P,
     2-[3-(Biphenyl-2-yl)-8-[(carboxymethyl)oxy]-2-methoxyindolizin-1-
     yl]glyoxylamide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
         (sPLA2 inhibitor; prepn. of indolizines as inhibitors of sPLA2 mediated
         release of fatty acids)
     ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
     1988:5780 CAPLUS
     108:5780
     6-(1-carbamoyl-1-hydroxymethyl)penicillanic acid derivatives, their
     preparation, and their use as antibacterial agents and/or .beta.-lactamase
     inhibitors
     Barth, Wayne Ernest
Pfizer Inc., USA
     Eur. Pat. Appl., 138 pp.
     CODEN: EPXXDW
     Patent
     English
FAN. CNT 1
     PATENT NO.
                       KIND DATE
                                               APPLICATION NO. DATE
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     EP 220939
                        A1 19870506
                                               EP 1986-308235
                                                                 19861023
         R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     WO 9006928
                        A1
                             19900628
                                               WO 1985-US2134
                                                                 19851029
         W: US
     DK 8605143
                        A
                              19870703
                                               DK 1986-5143
                                                                 19861028
     JP 62142183
                        A2
                              19870625
                                              JP 1986-258106
                                                                 19861029
     JP 06092417
                        B4
                              19941116
     US 4797394
                              19890110
                                               US 1987-85675
                                                                 19870605
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US 4868296 19890919 PRAI WO 1985-US2134 19851029 US 1987-85675 19870605 OS CASREACT 108:5780

US 1988-243568 19880912

GI

AB Title compds. I [n = 0-2; R = H, ester group hydrolyzable under physiol.conditions, acyloxymethyl or 1-(acyloxy)ethyl derived from conventional .beta.-lactam antibiotics; R1, R2 = H, (un) substituted Ph, phenylalkyl, cycloalkyl, naphthyl, azolyl, etc.; NR1R2 = pyrrolidino, piperidino, morpholino, 1,2,3,4-tetrahydroquinolinyl, etc.] and their salts, useful as antibacterial agents and/or .beta.-lactamase inhibitors (no data), were prepd. by a) hydrogenolysis of I (R = CH2Ph) and optionally b) converting the compd. to a cationic salt or c) converting the compd. to an acid addn. salt if the compd. contains a basic N atom. Further, the compds. may be converted to physiol. hydrolyzable esters or to acyloxymethyl or 1-(acyloxy)ethyl esters derived from conventional .beta.-lactam antibiotics. The benzyl ester was prepd. by a) reacting a cyclic anhydride II (q = 0, 2) with HNR1R2 and b) if desired, oxidizing the resulting 6-carbamoyl benzyl ester I (R = CH2Ph, n = 0) to a benzyl ester (n = 1 or 2) with 1 or 2 mol equiv 3-ClC6H4C(0)OOH. II are prepd. by a) reacting 6-dibromo compds. III with 1 mol equiv methylmagnesium Grignard reagent and then with H2C:CHCH2OCOCHO to form allyl ester IV; b) debromination to give V; c) hydrolysis to give the acid VI; and d) reaction with COCl2 in the presence of tertiary amine. Benzyl 6,6-dibromopenicillanate (III, q=0) was treated with MeMgBr at -78.degree., then allyl glyoxalate at -78.degree. to give (R) - and (S)-IV (q = 0) the (R)-isomer of which was debrominated to $g\overline{i}ve$ (S)-V (q = 0). Treating this with BuCHEtCO2Na, then Pd(PPh3)4 gave the Na salt of (S)-VI which was successively treated with COCl2 and NH4OH to give (S)-I (R = CH2Ph, R1 = R2 = H, n = 0). Hydrogenolysis in the presence of NaHCO3 and 10% Pd/C gave (S)-I (R = Na, R1 = R2 = H, n = 0). IT 4706-32-5P, N-Glyoxyloylpiperidine 16423-59-9P, N-Glyoxyloylmorpholine 79036-50-3P, N,N-Dimethylglyoxylamide 106435-93-2P, N-Glyoxyloylpyrrolidine 111605-39-1P, N-Isopropylglyoxylamide RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 75-16-1, Methylmagnesium bromide RL: RCT (Reactant); RACT (Reactant or reagent) IT (reaction of, with benzyl dibromopenicillanate and

dimethylglyoxylamide)

TT 4706-32-5 16423-59-9, N-Glyoxyloylmorpholine 64370-42-9. Allvl 79036-50-3, N.N-Dimethylglyoxylamide glyoxalate 106435-93-2, N-Glyoxyloylpyrrolidine 111605-39-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with benzyl dibromopenicillanate and methylmagnesium bromide)

IT 35564-99-9, Benzyl 6,6-dibromopenicillanate RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with methylmagnesium bromide and dimethylglyoxylamide)

1.5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN AN 1986:552787 CAPLUS

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10/620209
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ТΙ
      Synthesis of psilocin labeled with carbon-14 and tritium
      Poon, Grace; Chui, Yun Cheung; Law, Francis C. P.
ΑU
      Dep. Biol. Sci., Simon Fraser Univ., Burnaby, BC, V5A 1S6, Can.
CS
      Journal of Labelled Compounds and Radiopharmaceuticals (1986), 23(2),
SO
      167-74
      CODEN: JLCRD4; ISSN: 0362-4803
      Journal
DT
LΑ
      English
      CASREACT 105:152787
os
GI
   OH
              XNMe<sub>2</sub>
                       Т
      14C- and 3H-labeled psilocin (I, X = CH214CH2; C3H2C3H2) tryptamine), the
      principal active agent of hallucinogenic mushrooms, was synthesized from
      2-methyl-3-nitrophenol via 4-benzyloxyindole. 4-Benzyloxygramine was
      treated with K14CN to give 14C-4-benzyloxy-3-indoleacetic acid, an
      intermediate for I (X = CH214CH2). LiAl3H4 was used to reduce
      4-benzyloxy-3-indole-N, N-dimethylglyoxylamide to give I (X =
      C3H2C3H2).
      14C- and 3H-labeled psilocin (I, X = CH214CH2; C3H2C3H2) tryptamine), the
      principal active agent of hallucinogenic mushrooms, was synthesized from
      2-methyl-3-nitrophenol via 4-benzyloxyindole. 4-Benzyloxygramine was
      treated with K14CN to give 14C-4-benzyloxy-3-indoleacetic acid, an
      intermediate for I (X = CH214CH2). LiAl3H4 was used to reduce
      4-benzyloxy-3-indole-N,N-dimethylglyoxylamide to give I (X =
      C3H2C3H2).
1.5
      ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN
      1959:28666 CAPLUS
DN
      53:28666
OREF 53:5137e-g
      Glyoxylamide derivatives
ΤI
      Whitfield, Gordon H.
IN
PΑ
      Imperial Chemical Industries Ltd.
DT
      Patent
LA
      Unavailable
FAN.CNT 1
      PATENT NO.
                          KIND DATE
                                                   APPLICATION NO. DATE
                                 -----
PΤ
                                 19580702
                                                   GB
     N,N-Dialkyl substituted glyoxylamide derivs., useful as herbicides were prepd. Me2NCOCH(OH)NMe2 (I) (b8 70-3.degree.) (41.2 g.) was dissolved in 50 ml. MeOH and poured into a column (1 1/2'' .times. 3') packed with 500
      g. polystyrenesulfonic acid cation-exchange resin, the resin washed with
      two 500 ml. portions MeOH, and 2 eluate fractions were collected. Removal
      of MeOH from the 1st eluate and distn. of the residue gave 20.69 g. N.N-
      dimethylglyoxylamide Me hemiacetal (II), b20 82.86.degree..
      Similar treatment of the 2nd MeOH eluate gave 3.78 g. II. Exposure of II
      to moist air or treatment with the theoretical amt. of H2O gave
     Me2NCOCHO-0.5H2O (III), m. 121.degree.. Similar treatment of I in H2O gave III, m. 121-2.degree., directly. Cf. C.A. 53, 227d.

N,N-Dialkyl substituted glyoxylamide derivs., useful as herbicides were prepd. Me2NCOCH(OH)NMe2 (I) (b8 70-3.degree.) (41.2 g.) was dissolved in 50 ml. MeOH and poured into a column (1 1/2'' .times. 3') packed with 500 g. polystyrepseulfonic acid gation explanate resint the resint backet with
      g. polystyrenesulfonic acid cation-exchange resin, the resin washed with
      two 500 ml. portions MeOH, and 2 eluate fractions were collected. Removal
      of MeOH from the 1st eluate and distn. of the residue gave 20.69 q. N.N-
      dimethylglyoxylamide Me hemiacetal (II), b20 82.86.degree..
      Similar treatment of the 2nd MeOH eluate gave 3.78 g. II. Exposure of II
      to moist air or treatment with the theoretical amt. of H2O gave
      Me2NCOCHO-0.5H2O (III), m. 121.degree.. Similar treatment of I in H2O
     gave III, m. 121-2.degree., directly. Cf. C.A. 53, 227d.
     ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
     1959:1738 CAPLUS
DN
     53:1738
OREF 53:227d-f
    Glyoxylic acid derivatives
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=> s e4-e6

1 61960-32-5/BI (61960-32-5/RN) 1 79036-50-3/BI (79036-50-3/RN) 1 939-71-9/BI (939-71-9/RN)

=> d scan

L7

L7 3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN 1,3-Benzodioxole-2-carboxamide (6CI, 7CI, 8CI) MF C8 H7 N O3

3 (61960-32-5/BI OR 79036-50-3/BI OR 939-71-9/BI)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN Acetamide, 2-hydroxy-2-methoxy-N,N-dimethyl- (9CI) MF C5 H11 N O3

$$\begin{array}{c} \text{O} \quad \text{OH} \\ || \quad | \\ \text{Me}_2 \text{N-C-CH-OMe} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN Acetamide, N,N-dimethyl-2-oxo- (9CI) MF C4 H7 N O2

Whitfield, Gordon H. IN

Imperial Chemical Industries Ltd. PA

Patent DT

LA Unavailable

PATENT NO.

FAN.CNT 1

KIND DATE

APPLICATION NO. DATE

ΡI GB 793807 19580423 GB

R1R2NCOCHO, where R1 and R2 are alkyl groups, is prepd. by treating R1R2NCO with LiC.tplbond.CH to yield R1R2NCOCH(OLi)NR1R2 followed by AB hydrolyzing to R1R2NCOCH(OH)NR1R2 (I). I with an acid gives R1R2NCOCHO and the acid salt of R1R2NH. E.g., 219 g. Me2NCO added dropwise to 16 g. LiC.tplbond.CH in 150 ml. boiling MePh, reftuxed 0.5 hr., and MePh and unreacted Me2NCO distd. in vacuo left 108 g. Me2NCOCH(OLi)NMe2 (II). I added to 250 ml. H2O, extd. with ether, dried, and distd. yielded Me2NCOCH(OH)NMe2 (III), b8.0 70-3.degree.. A small portion of III with 2,4-dinitrophenylhydrazine sulfate yielded N,Ndimethylglyoxylamide 2,4-dinitrophenylhydrazone, m. 208.degree... III is useful as an intermediate in the prepn. of herbicides and pharmaceuticals.

AB R1R2NCOCHO, where R1 and R2 are alkyl groups, is prepd. by treating R1R2NCO with LiC.tplbond.CH to yield R1R2NCOCH(OLi)NR1R2 followed by hydrolyzing to R1R2NCOCH(OH)NR1R2 (I). I with an acid gives R1R2NCOCHO and the acid salt of R1R2NH. E.g., 219 g. Me2NCO added dropwise to 16 g. LiC.tplbond.CH in 150 ml. boiling MePh, reftuxed 0.5 hr., and MePh and unreacted Me2NCO distd. in vacuo left 108 g. Me2NCOCH(OLi)NMe2 (II). II added to 250 ml. H2O, extd. with ether, dried, and distd. yielded Me2NCOCH(OH)NMe2 (III), b8.0 70-3.degree.. A small portion of III with 2,4-dinitrophenylhydrazine sulfate yielded N,Ndimethylglyoxylamide 2,4-dinitrophenylhydrazone, m. 208.degree.. III is useful as an intermediate in the prepn. of herbicides and

pharmaceuticals.

10/620209

=> d scan

3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN Glycolamide, 2-dimethylamino-N,N-dimethyl- (6CI)

C6 H14 N2 O2 COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Acetic acid, oxo- (9CI)

C2 H2 O3

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6

3 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN Acetamide, 2-[(2,4-dinitrophenyl)hydrazono]-N,N-dimethyl- (9CI) C10 H11 N5 O5 IN

MF

$$\begin{array}{c|c} O_2N & & & O \\ & & & \\ & NH-N = CH-C-NMe_2 \end{array}$$

10/620209

=> d his

(FILE 'HOME' ENTERED AT 17:57:21 ON 16 JAN 2004)

FILE 'CAPLUS' ENTERED AT 18:00:09 ON 16 JAN 2004

Ε	SCHLOEMER	G/	ΙN
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L1 17 S E4-E6

L2 L3 0 S L1 AND ACETAMIDE? 0 S L1 AND IMIDAZO? 7 S L1 AND PROCESS

L4

10/620209

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ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
L4
```

2003:222366 CAPLUS AN

138:238439 DN

TIProduction of benazepril and analogs by kinetic resolution of an intermediate

Tseng; Wei-Hong; Cheng, Kau-Ming; Schloemer, George; Chen, Chien-Wen; Cheng, Chih-Wen

PA

Scinopharm Taiwan, Ltd., Taiwan U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 910,509. SO CODEN: USXXCO

DTPatent

LΑ English

FAN CNT 2				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI , US 2003055245	A1	20030320	US 2002-151772	20020521
US 2002183515	A1	20021205	US 2001-910509	20010719
US 6548665	B2	20030415		
PRAI US 2001-291888P	P	20010518		
US 2001-910509	A2	20010719		
OS MARPAT 138:238439)			
GI				

A process for the prepn. of benazepril and analogs I by reaction AB of compd. II [Z1 = halogen] with compd. III [R1 = H, alkyl or a combination of H and alkyl; R2 = alkyl] in a polar solvent via epimerization and kinetic resoln. of intermediate catalyzed by phase transfer catalyst was developed. Thus, coupling of L-homophenylalanine Et ester to 3-bromo-2,3,4,5-tetrahydro-1H-1-benzapin-2-one using sodium iodide, epimerization and kinetic resoln. of intermediate carboxylic acid, followed by esterification gave compd. (S,S)-I (R1 = H, R2 = Et) in 80% yield and the ratio of enantiomers detd. by HPLC is SS:RR > 99.5:0.5.

=> d 2-7 bib abs

L4ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:736940 CAPLUS

137:263201

TΤ Process for making taxane derivatives

Schloemer, George; Chen, Yung-fa; Lin, Chien Hsin; Daniewski, IN Wlodzimierz

PAScinopharm Taiwan, Ltd., Taiwan

so U.S. Pat. Appl. Publ., 9 pp. CODEN: USXXCO

DTPatent

LΑ	English				
FA	N.CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	US 2002137955	A1	20020926	US 2001-815517	20010323
	US 6531611	B2	20030311		
	WO 2002076967	A1	20021003	WO 2001-US9348	20010323
	W: CN, JP				
	RW: AT, BE,	CH, CY	, DE, DK, ES,	FI, FR, GB, GR, IE	, IT, LU, MC, NL,
	PT, SE,				

```
PRAI US 2001-815517
                      Α
                           20010323
    CASREACT 137:263201; MARPAT 137:263201
GΙ
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
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The present invention provides a novel semi-synthetic method of producing
     a variety of novel taxane derivs. I (R1 = alkoxy, R2 = alkoxy, H; R3 =
     alkyl; R4 = alkyl, aryl; X = protective group) by reaction of a
     I may be further modified to form pactitaxel and other potentially useful
     taxane derivs. Thus, III (R1 = R2 = MeO; R3 = Me; R4 = Ph), prepd. from
     (2R,3S)-phenylisoserine-HCl and .alpha.-methylcinnamic acid, was treated
     with 7-triethylsilylbaccatin III to give the corresponding I, which was
     converted to paclitaxel in 4 steps.
     ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AN
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phenylisoserine deriv. II with a suitably blocked Baccatin III deriv. III.
     2002:290826 CAPLUS
     136:310051
DN
TΙ
     Process for the preparation of 4,4'-diketo-.beta.-carotene
     derivatives
ΤN
     Schloemer, George C.; Schloemer, Danuta A.; Davis, Jeffery L.
PΑ
     Prodemex, S.A. D.E.C.V., Mex.
     U.S., 4 pp.
     CODEN: USXXAM
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
     US 6372946
                             20020416
                       B1·
                                            US 2001-953007
                                                              20010913
     NO 2002004266
                       Α
                             20030314
                                            NO 2002-4266
                                                              20020906
     CN 1417207
                       A
                             20030514
                                            CN 2002-141620
                                                              20020906
     EP 1293499
                       A1
                            20030319
                                            EP 2002-256236
                                                              20020909
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRAI US 2001-953007
                       А
                             20010913
OS
    CASREACT 136:310051
    A method of prepg. .beta.-carotene derivs. such as canthaxanthin and
     astaxanthin was described. The method employs an in situ system to
     generate hypobromous acid as the oxidizing agent using a salt of sulfite,
     hydrogen sulfite or bisulfite in combination with a bromate salt.
     Astaxanthin and canthaxanthin were obtained in good yield with a
     significantly reduced reaction time. Thus, zeaxanthin was oxidized using
     sodium hydrogen sulfite in chloroform to form axtaxanthin.
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
    ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
     2001:798186 CAPLUS
    135:344616
    Oxidative process for the preparation of astaxanthin from
    zeaxanthin using a halogenating agent with the salt of chloric or bromic
     acid in an inert solvent
    Schloemer, George C.; Davis, Jeffery L.
```

AN

TΤ

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IN
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Prodemex, S.A. de C.V., Mex.

PCT Int. Appl., 12 pp. SO CODEN: PIXXD2

דת Patent

LΑ English

FAN.CNT 1

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PATENT NO.
                             KIND DATE
                                                         APPLICATION NO. DATE
PΙ
      WO 2001081301
                             A2
                                     20011101
                                                         WO 2001-US13295 20010425
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB,
                 GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
                NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU,
                 TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      US 2001051357
                              A1 20011213
                                                        US 2001-813685
```

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US 6376717
                       B2
                             20020423
     EP 1276719
                       A2
                             20030122
                                            EP 2001-932633
                                                              20010425
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     NO 2001006293
                             20020211
                                            NO 2001-6293
                                                              20011220
                      Α
     ZA 2001010503
                             20020829
                                            ZA 2001-10503
                       Α
                                                              20011221
PRAI US 2000-199875P
                      P
                             20000426
     US 2001-813685
                             20010319
                       Α
     WO 2001-US13295
                       W
                             20010425
OS
     CASREACT 135:344616
AB
     Astaxanthin is prepd. from zeaxanthin by oxidn. using a halogenating agent
     with the salt of chloric or bromic acid in an inert solvent.
     ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     1996:689881 CAPLUS
\Delta N
DN
     126:19174
ΤI
     Preparation of acyclovir using 1,3 dioxolane
     Schloemer, George C.; Han, Yeun-kwei; Harrington, Peter J.
IN
     Syntex (U.S.A.) Inc., USA
PA
SO
     U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 280,269, abandoned.
     CODEN: USXXAM
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                              DATE
     -----
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                                            US 1995-426005
ΡI
     US 5567816
                             19961022
     CA 2152863
                             19960127
                       AA
                                            CA 1995-2152863
                                                             19950628
     JP 08053451
                       A2
                             19960227
                                            JP 1995-176022
                                                              19950712
     EP 709385
                       AΊ
                            19960501
                                            EP 1995-110955
                                                              19950713
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     CN 1122805
                      A
                             19960522
                                            CN 1995-115316
                                                              19950725
     BR 9503442
                       Α
                             19960604
                                            BR 1995-3442
                                                              19950725
     FI 9503580
                             19960127
                                            FI 1995-3580
                       Α
                                                              19950726
PRAI US 1994-280269
                             19940726
     US 1995-426005
                             19950427
AΒ
     A process for the prepn. of acyclovir via coupling of guanine or
     silylated guanines with 1,3-dioxolane in the presence of a selective
     alkylation catalyst selected from the group consisting of
     trifluoromethanesulfonic acid, trimethylsilyl trifluoromethanesulfonate,
     and bistrimethylsilyl sulfonate, and hydrolyzing the product thus formed.
     ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
     1996:313501 CAPLUS
AN
DN
     124:343989
     Method for producing 9-(2-hydroxyethoxymethyl)guanine (acyclovir) as
TΙ
     antiviral agent
IN
     Han, Yuen-Kwei; Harrington, Peter John; Schloemer, George Charles
     F. Hoffmann-La Roche Ag, Switz.
PA
SO
     Can. Pat. Appl., 28 pp.
     CODEN: CPXXEB
\mathbf{DT}
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
                      _ _ _ _
ΡI
     CA 2152863
                       AΑ
                            19960127
                                            CA 1995-2152863 19950628
     US 5567816
                       Α
                            19961022
                                            US 1995-426005
                                                             19950427
PRAI US 1994-280269
                            19940726
     US 1995-426005
                            19950427
     CASREACT 124:343989; MARPAT 124:343989
GI
```

AB An efficient and selective process for the synthesis of the antiviral 9-(2-hydroxyethoxymethyl)guanine (acyclovir) (I) involves (1) contacting a silylated guanine or mixts. of silylated guanine (II; Z1, Z2, Z3 = H, R1R2R3Si; wherein R1 - R3 = lower alkyl; provided that at least one of Z1 -Z3 = R1R2R3Si) with 1,3-dioxolane (III) in the presence of a selective alkylation catalyst and (2) hydrolyzing the product formed. Said catalyst is selected form CF3SO3H, CF3SO3SiMe3, and bis(trimethylsilyl) sulfonate and CF3SO3SiMe3 is generated by contacting CF3SO3H with hexamethyldisilazane. The process avoids the use of acyl groups for protection of guanine, essentially specific for the prepn. of the N-9 isomer, thus eliminates the need for the chromatog. sepn. of the N-9/N-7 isomer mixts., provides I in good yields, requires simple starting materials and reaction conditions, and is carried out from start to finish in a single reaction vessel. Thus, a mixt. of 25 q guanine, 125 mL hexamethyldisilazane, and 1 mL CF3SO3SiMe3 was refluxed at 130-135.degree. for 24 h, cooled to 70.degree., treated with 25 mL $\,$ 1,3-dioxolane, refluxed for 16 h, distd. under reduced pressure to remove excess hexamethyldisilazane, cooled to 70.degree., poured into a mixt. of 600 mL 10% aq. AcOH, and heated to give a soln. The soln. was treated with 1.25 g activated carbon to remove any color, filtered, and the filtrate was slowly cooled to 5.degree. to give, after filtering off the white cryst. solid formed, 78% I.

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ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
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AN 1989:23725 CAPLUS

110:23725 DN

ΤI Process for preparing (.+-.)-1,2-dihydro-3H-pyrrolo[1,2-

a]pyrrole-1,7-dicarboxylates as intermediates for pharmaceuticals TN

Khatri, Hiralal N.; Fleming, Michael P.; Schloemer, George C.

Syntex (U.S.A.), Inc., USA Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DT Patent

LΑ English

FAN.CN	T 1					
P	ATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
-						
				EP	1988-100390	19880113
E	P 275092	B1	19920603			
					T, LI, LU, NL	
บ	S 4835288	A	19890530	US	1987-3162	19870114
				US	1987-3104	19870114
D	K 8800143	Α	19880715	DK	1988-143	19880113
F	I 8800133	Α	19880715	FI	1988-133	19880113
F	I 90344	В	19931015			
F	I 90344	C	19940125			
N	0 8800127	A	19880715	NO	1988-127	19880113
N	0 169124	В	19920203			
N	0 169124	. C	19920513			
A	U 8810240	A1	19880721	AU	1988-10240	19880113
A	U 613334	B2	19910801			
J	P 63198684	A2	19880817	JP	1988-6757	19880113
Z.	A 8800225	A	19890927	ZA	1988-225	19880113
H.	U 48881	A2	19891128	HU	1988-117	19880113
H	U 200606	В	19900728			
H.	U 51595	A2	19900528	HU	1989-5354	19880113
H	U 201728	В	19901228			
H	U 52045	A2	19900628	HU	1989-5355	19880113
H	J 203532	В	19910828			
H	J 52046	A2	19900628	HU	1989-5356	19880113

	ΗU	203721	В	19910930			
	$_{ m IL}$	85094	A1	19910916	IL	1988-85094	19880113
	$_{ m IL}$	96388	A1	19910916	$_{ m IL}$	1988-96388	19880113
	$_{ m IL}$	96389	A1	19910916	$_{ m IL}$	1988-96389	19880113
	AT	76873	\mathbf{E}	19920615	AΤ	1988-100390	19880113
	ES	2041703	T 3	19931201	ES	1988-100390	19880113
	HU	213614	В	19970828	HU	1990-1266	19880113
	CA	1340404	A1	19990223	CA	1988-556465	19880113
	US	4874872	Α	19891017	US	1988-255799	19881011
	US	4937368	A	19900626	US	1989-299701	19890123
	NO	9003993	A	19880715	NO	1990-3993	19900913
	NO	174583	В	19940221			
	NO	174583	C	19940601			
	ИО	9003994	A	19880715	NO	1990-3994	19900913
	NO	174346	В	19940110			
	ИО	174346	C	19940420			
	NO	9003995	A	19880715	ИО	1990-3995	19900913
		173828	В	19931101			
	ИО	173828	C	19940209			
	FΙ	92488	В	19940815	FI	1991-2709	19910605
		92488	C	19941125			-
		95242	В	19950929	FΙ	1991-2710	19910605
	$_{\rm FI}$	95242	C	19960110			
		91148	В	19940215	FI	1993-320	19930126
	FI	91148	C	19940525			
PRAI		1987-3104	Α	19870114			
	US	1987-3162	A	19870114			
		1988-100390	Α	19880113			
	HU	1988-117	A	19880113			
		1988-85094	Α	19880113			
		1988-127	A1	19880113			
os	CAS	REACT 110:23725	; MAF	RPAT 110:23725			
GI							

AB A process for producing diesters I (R = alkyl), useful as intermediates for pharmaceuticals II [Ar = alkyl, alkoxy, or halo (un)substituted Ph, 2- or 3- furoyl, 2- or 3-thienyl, 2- or 3-pyrryl; R = H, alkyl] useful as analgesics, antiinflammatories, antipyretics, and smooth muscle relaxants (no data), comprised: a) cyclizing pyrrole III (X = halo) with a hindered amine in an aprotic polar solvent; or b) reacting pyrrolidine IV with XCH2CHo (X = halo) in aq. soln. I (R = alkyl) are sapond. to I (R = H) which are monoesterified to I (R at 1 = alkyl, R at 7 = H) which are decarboxylated to II (no ArCO group). These are aroylated with an amide or morpholide to give II. I (R = H), which had been prepd. in 5 steps from BrCH2CH2NH2.HBr and (MeO2CCH2)2CO was converted in 4 steps into II (Ar = 4-MeC6H4, R = H).

L Number	Hits	Search Text	DB	Time stamp
1	3478	phosphorus adj tribromide	USPAT;	2004/01/16 17:19
			US-PGPUB	
2	30687	thionyl adj chloride	USPAT;	2004/01/16 17:20
			US-PGPUB	
3	315	(phosphorus adj tribromide) near (thionyl adj chloride)	USPAT;	2004/01/16 17:20
1			US-PGPUB	
4	593	imidazopyridine	USPAT;	2004/01/16 17:21
1		•	US-PGPUB	
5	0	((phosphorus adj tribromide) near (thionyl adj chloride)) and	USPAT;	2004/01/16 17:20
		imidazopyridine	US-PGPUB	
6	271	imidazopyridines	USPAT;	2004/01/16 17:21
			US-PGPUB	
7	745	imidazopyridine or imidazopyridines	USPAT;	2004/01/16 17:21
			US-PGPUB	
8	0	(imidazopyridine or imidazopyridines) and ((phosphorus adj	USPAT;	2004/01/16 17:22
		tribromide) near (thionyl adj chloride))	US-PGPUB	
9	11485	halogenating	USPAT;	2004/01/16 17:22
	_		US-PGPUB	
10	0	((phosphorus adj tribromide) near (thionyl adj chloride)) near	USPAT;	2004/01/16 17:22
		halogenating	US-PGPUB	
11	180	((phosphorus adj tribromide) near (thionyl adj chloride)) same	USPAT;	2004/01/16 17:45
	_	halogenating	US-PGPUB	
12	3	(((phosphorus adj tribromide) near (thionyl adj chloride)) same	USPAT;	2004/01/16 17:47
		halogenating) and sleep	US-PGPUB	
13	113	hydrolysis and (((phosphorus adj tribromide) near (thionyl adj	USPAT;	2004/01/16 17:47
	0.10	chloride)) same halogenating)	US-PGPUB	
14	310		USPAT;	2004/01/16 17:47
1	_	tribromide) near (thionyl adj chloride)) same halogenating)	US-PGPUB	
15	1	hydrolysis same (((phosphorus adj tribromide) near (thionyl adj	USPAT;	2004/01/16 17:48
		chloride)) same halogenating)	US-PGPUB)